

ORIGINAL RESEARCH ARTICLE

INTERNET ADDICTION AMONG STUDENTS OF SELECTED SCHOOLS OF POKHARA, NEPAL

Sakun Singh¹, Sandhya Shrestha^{1,*}

¹Department of Nursing, Manipal college of Medical Sciences, Pokhara, Nepal

Received: 18 Mar, 2020

Accepted: 15 Feb, 2021

Published: 25 Mar, 2021

Key words: Adolescence; Internet addiction; Internet addiction test.

***Correspondence to:** Sandhya Shrestha, Department of Nursing, Manipal Teaching Hospital, Pokhara, Nepal.
Email: Shrestha_sandhu@yahoo.com

Citation

Singh S, Shrestha S. Internet addiction among students of selected schools of Pokhara, Nepal. Journal of Chitwan Medical College. 2021;11(35):104-7.



ABSTRACT

Background: Internet is accessed by over billion users worldwide and continues to rise every year. A huge number of these users belong to teenagers and young adults that uses internet on daily basis for different purposes. The present study was conducted with the purpose to assess the internet addiction among adolescence.

Methods: A cross-sectional study was conducted among students studying in selected schools of Pokhara, Nepal. A total 144 students were selected as sample using purposive sampling during April/May 2019. Data collection was done using structured demographic proforma, Modified young 20 item internet Addiction Test. Self-administered method was used for data collection. Data were analyzed using descriptive and inferential statistics.

Results: The study revealed among the 144 students mean age was 15.52 +1.17, two third 60.7% were from 16-20 years of age, 61.1 % were male, more than half 51.1% were from grade nine and starting mean age of the respondents was 11.78+2.4. Majority 85.4 % were using internet from more than one year, 43.8% were spending one to two hour with internet users, 65.3% of the respondents were using internet for recreation purpose, all most respondents 96.5 were using internet in home, 74.23% were using internet in mobile, starting mean age was 11.78+2.4. More than half 51.2% of the respondents had moderate to severe level of Internet addiction.

Conclusions: Study findings shows moderate to severe level of Internet addiction. There was significant association between internet addiction and Internet using year, duration of internet use, spent with internet user and purpose of internet use.

INTRODUCTION

According to the internet society report internet user number reached to 3 billion peoples across the world.¹The use of the internet has become an important part of adolescents' daily routines. Each day, adolescents make use of the internet for connecting and communicating with friends and family, and for academic as well as leisure activities. Researchers have agreed that internet use has brought numerous positive changes in human lives including promotion of psychological well-being.² Rapid expansion and proliferation of the internet has provided better opportunities for communication, information and social interaction. However, the excessive undisciplined use by some individuals has led to the emergence of the concept of internet addiction.³ There were 10.21 million internet users in Nepal in January 2020. The number of internet users in Nepal increased by 315 thousand (+3.2%) between 2019 and 2020. Internet penetration in Nepal stood at 35% in January 2020.⁴The majority of internet users (14.2%) are 15-19-year olds.⁵ A study conducted by CWIN-Nepal in which 1430 students from the inner city of Kathmandu participated, showed that out of the total respondent children 82% use internet. Among the children using internet, 74% were girls and 91% were

boys. About 94.7% students from private schools and 58.3% from public schools use the internet. Of those, 59.5% spend 1-4 hours a week on the internet. 94.7% students from private schools and 58.3% from public schools use the Internet.⁶ Thus this study was aimed to assess the internet addiction among adolescence and the association between demographic variables and use of internet among adolescence.

METHODS

A cross-sectional study was carried out in two selected schools of Pokhara, Nepal. Population of the study were adolescent students who were studying in grade 9 and 10. Data was collected from April 2019 to May 2019. Complete enumeration system was used so entire population was taken for sample size which included 144 students of 9th and 10th grade. Modified young internet Addiction Tool,⁷ a 20-item questionnaire was translated and used for the study. Each answer was scored on a Likert scale from 0 to 3. Score 0= Not applicable, 1=rarely, 2= occasionally, 3=frequently. Internet addiction was categorized in four level; Normal<18.25, mild 18.25-24.5, moderate 24.6-32.0 and severe>32 in Quartile basis. Data was collected in schools during school hours after getting data collection permission from the respective school principals. Eligible participants

were explained about the purpose of the study and took verbal informed consent from them. Prior to data collection, ethical approval was taken from the Institutional Ethical Committee of Manipal Teaching Hospital (MCOMS-IRC) and written informed consent was obtained from respondents' parents. About 10% of the sample size was taken for conducting pilot study to find out the feasibility of the study, clarity of language of the tool and to finalize the plan for analysis while 10% of the sample size was taken for conducting reliability to find out the reliable of the study which was conducted in different school. Those students were similar in characteristics with actual samples of this study. The questionnaire was distributed to students in the classroom and returned back in the presence of researcher. Data entry and analysis was done using SPSS version 19. Both descriptive and inferential statistics was used for data analysis. p-value at <0.05 was considered significant.

RESULTS

Table 1 revealed that among 144 respondents, more than half were from 16-20 years (50.7%) mean age was 15.52 +1.17, internet starting mean age was 11.78+2.4. Around 61.1 % were male, more than half (51.4%) were from grade 9, Majority (85.4 %) were using internet form more than one year, highest percentage were spending time in internet more than two hour (59.7%).

Table 1: Demographic characteristics and use of internet of Respondents (n=144)

Demographic Variables/Use of internet	Frequency (%)
Age(years)	
11-15	71(49.3)
16-20	73(50.7)
Mean (yrs) ± S.D	(15.52 ±1.17)
Starting age of internet (Yrs)	11.78+2.4
Gender	
Male	88(61.1)
Female	56(38.9)
Grade	
Nine	74(51.4)
Ten	70(48.6)
Internet using year	
6 months -1year	21(14.6)
>1 year	123(85.4)
Total hour spent	
<1hour	12(8.4)
1-2hour	46(31.9)
< 2hour	86(59.7)
Time spent with internet user	
1-2 hour	54(37.5)
<1hour	63(43.8)
>2hour	27(18.7)
Objectives of using internet	
Education	50(34.7)
Recreation	94(65.3)

Table 2: Use of internet of Respondents (n=144)

Use of internet	Frequency (%)
Place of using internet	
Home	139(96.5)
School	5(3.5)
Material used for internet	
Laptop/ Computer	37(25.7)
Mobile	107(74.3)
Time of using internet	
Morning	3(2.1)
Afternoon	24(16.7)
Evening	78(54.2)
Night	39(27.0)

Table 2 showed almost (96.5%) of the respondents were using internet in home, highest of the respondents (74.3%) were using internet in mobile, more than half (54.2%) of the respondents were using internet during evening time.

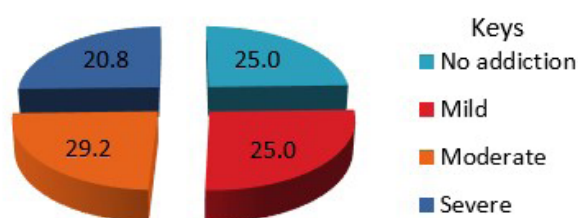


Figure 1: Internet addiction among adolescence

Figure 1 showed 51.2% of the respondents had moderate to severe level of Internet addiction

Table 3: Association between level of internet addiction and selected variables of Respondents (n=144)

Variables	Level of Internet addiction		X ²	p-value
	No addiction n(%)	Addiction n(%)		
Age				
15-Nov	32(45.1)	39(54.9)	1.361	0.243
16-20	40(54.8)	33(45.2)		
Gender				
Male	46(52.3)	42(47.7)	4.68	0.494
Female	26(46.4)	30(53.6)		
Grade				
Nine	35(47.3)	39(52.7)	0.445	0.505
Ten	37(52.9)	33(47.1)		
Internet using year				
6months	17(81.0)	4(19.0)	9.422	.002**
>1 year	55(44.7)	68(55.3)		
Duration of internet use				
<1 hour	11(91.7)	1(8.3)	13.492	.001**
1-2 hour	27(58.7)	19(41.3)		
>2hour	34(39.5)	52.0(60.5)		
Spent with internet user				
<1hour	38(70.4)	16(29.6)	15.3165	.000**
1-2 hour	26(41.3)	37(58.7)		
>2hour	8(29.6)	19(70.4)		
Objectives of using internet				
Education	31(62.0)	19(38.0)	4.412	.036**
Recreation	41(43.6)	53(56.4)		

Table 3 showed the significant association between levels of Internet addiction and Internet using year, duration of internet use, spent with internet user, objectives of internet user.

DISCUSSION

The present study revealed that more than half (51.2%) of the respondents had moderate to severe level of internet addiction whereas similar findings were reported by other study⁸ in which 40.7% of the respondents reported moderate to severe addiction but in contrast to the findings of the study conducted in India⁹ where 6.5% of the respondents had moderate to severe addiction. This variation may be due to study setting, tools used and Internet Addiction scoring cut-off points used in same tools in the studies.

About 60.7% were from 16-20 years of age which support the present study as two third 67.6% of internet using respondents were from 15 to 19 years of age group. This similar study showed that large proportion of the respondent 74.23% were using internet in mobile which is consistent with this study as majority 70.5% of the respondents were using mobile Phone and they are using it in the evening.¹⁰ The respondents were using internet in mobile it may be because of availability and affordability with the widespread adoption of home computers and smart phones and easy access to internet package of 3G/4G scheme on mobile phone. About 47.7% were male in this study which is consistent with the literature is the large susceptibility for males to be addicted to the Internet¹¹⁻¹⁵ whereas study conducted by Gupta et al contradicts the findings as female were more addicted to internet.¹⁶ This study found respondents 52.0% use internet for more than 2 hour which is contrast with the result in turkey¹⁷ as 63.3% was using the internet less than one hour. The present study reveals that

the Purpose of internet was recreation among the respondents was 53.0 % which is consistent with study conducted by Karacic et.al.¹⁸ The present study reveals there was no association between age, gender, grades in same way which is consistent with other studies.^{19,20} However, the result constant with the findings²¹ which showed significant association of internet addiction with age of the respondent.

The study was conducted among two Private schools only of Pokhara, Nepal with self-administered questionnaire. Due to this, the generalizability of this study finding to all adolescent Internet users in Nepal is a matter of concern.

CONCLUSION

This study found more than half of the respondents had moderate to severe level of Internet addiction. There is association between Internet addiction and Internet using year, duration of internet use, spent with internet user. It also reveals that the place of internet use was home it is understood that though internet has become one of the most significant information resources for adolescents, unfortunately, the almost half of adolescent population has the problem of addiction.

ACKNOWLEDGEMENT

Our Special thanks to Participants of school children for cooperation during Data Collection and thanks to Ms. Manmaya Rana, MCOMS for helping in Data Collection.

CONFLICT OF INTEREST: None

FINANCIAL DISCLOSURE: None

REFERENCES:

1. Internet Society .Global Internet Report 2014. Available from <https://www.internet Society. org/wp-content/uploads/2017/08/IS-ExSummmary-30may.pdf>. Retrieved on February 12th 2020
2. Chen W, Boase J, Wellman B. The global villagers: Comparing Internet users and uses around the world. *The Internet in everyday life*.2002;74–113. [LINK]
3. Mamun MA, Hossain MS, Siddique AB, Sikder MT, Kuss DJ , Griffiths MD. Problematic internet use in Bangladeshi students: the role of socio-demographic factors, depression, anxiety, and stress. *Asian Journal of Psychiatry*.2019;44(8):48-54. [DOI]
4. Datareportal. Digital 2020: Nepal [Internet]. 2020 [cited 2021 Jan 21]. Available from: <https://datareportal.com/reports/digital-2020-nepal>
5. Malaysian Communications and Multimedia Commission. Household use of the Internet users survey [Internet].2012 [cited 2020 Dec 14]. Available from: <https://www.mcmc.gov.my/skmmgovmy/media/General/pdf/InternetUsersSurvey2012.pdf>
6. Tuladhar S. Protecting Children in Cyberspace [Internet]. 2009 [cited 2020 Dec 14]. Available from: <https://nta.gov.np/en/wtisd-2009-2/>
7. Young K S, Case C J. Internet abuse in the workplace: New trends in risk management. *Cyber psychol Behav*2004; 7(1):105-11. [DOI]
8. Bahrainian SA, Alizadeh KH, Raeisoon MR, Gorji OH, Khazae A. Relation of Internet Addiction with self esteem and depression in university students. *J Pre Med Hyg* .2014;55(3): 86-9. [PMID]
9. Kayastha B, Gurung A, Chawal R. A Descriptive Study to Assess the Level of Internet Addiction among Adolescents: A Case Study of High Schools in Mangalore. *J Child Adolesc Behav* 2018; 6(3): 378. [DOI]
10. Banstola RS, Adhikari M, Bastola N. Internet Addiction among School going Adolescents in Pokhara, Western Nepal. *Int. J. Polit. Sci. Develop*. 2018; 6(3): 90-6. [DOI]
11. Lam LT, Peng ZW, Mai JC, Jing J. Factors Associated with Internet Addiction among Adolescents. *Cyber Psychol Behav*. 2009; 12(5): 551-5. [DOI]
12. Dhir, A, Chen S, Nieminen M. Psychometric Validation of the Compulsive Internet Use Scale: Relationship with Adolescents' Demographics, ICT Accessibility, and Problematic ICT Use. *Social Science Computer Review* 2015;2(12):1-18. [DOI]
13. Brezing C, Derevensky JL, Potenza MN. Non-substance addictive behaviors in youth: pathological gambling and problematic internet use. *Child Adolesc Psychiatr Clin N Am* 2010; 19(3):625–41. [DOI]
14. Munno D, Saoldi M, Bechon E, Sterpone SCM,Zullo G. Addictive behaviors and personality traits in adolescents. *CNS Spectrums* 2016; 21(2):207-13. [DOI]
15. Karmacharya I ,Bhujel K,yadavDK,Subedi R K. Prevalence of Internet Ad-

- diction among Higher Secondary Level Students in Kathmandu District , JHAS, 2018; 7(1): 40-46. [\[LINK\]](#)
16. Gupta D, Prabhu S. Study of Internet Addiction in Young Adults. International Journal of Health Sciences and Research.2020; 10(4):52-58. [\[LINK\]](#)
 17. Cicekoglu, P, Durualp E, Durualp E. Evaluation of the level of internet addiction among 6 th-8 th grade adolescents in terms of various variables. European Journal of Research on Education.2014;7:2228. [\[LINK\]](#)
 18. Karacic S, OreskovicS. Internet Addiction Through the Phase of Adolescence: A Questionnaire Study.JMIR Ment Health. 2017; 4(2): e11.Published online 2017 Apr 3. [\[DOI\]](#)
 19. Ač-Nikolić E, Zarić D, Nićiforović-Šurković O. Prevalence of internet Addiction amongSchool children in Novi Sad. Srpski arhiv za celokupno lekarstvo. 2015; 143(11-12):719-25. [\[DOI\]](#)
 20. Shek DT, Yu L. Internet addiction phenomenon in early adolescents in Hong Kong. The Scientific World Journal .2012:1-9. [\[DOI\]](#)
 21. Sargin N. Internet addiction among adolescence. Educational Research and Review.2012; 7(27): 613-8. [\[LINK\]](#)